

S-P6SMB*** CA Series

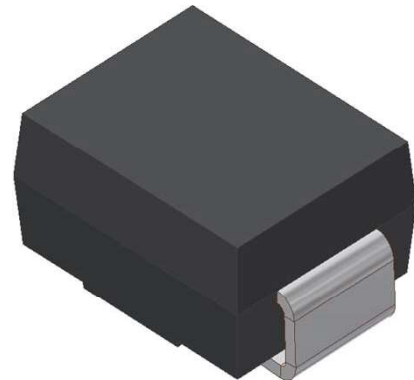
SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR

VOLTAGE 6.8 TO 600 Volts, 600 Watt Peak Pulse Power

1. FEATURES

- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications in order to optimize board space
- Low profile package
- Built-in strain relief
- Glass passivated junction
- Low inductance
- Excellent clamping capability
- Repetition Rate (duty cycle): 0.01%
- Fast response time: typically less than 1.0ps
- Typical IR less than 1mA above 10V
- High temperature soldering guaranteed: 260°C/10 seconds,
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.
- Weight: 0.088g

SMB
(JEDEC DO-214AA)



2. MECHANICAL DATA

Case: Epoxy, Molded

Terminals: Plated leads, solderable per MIL-STD-202, Method 208

Polarity: Without Color band denoted cathode

Mounting Position: Any

3. MAXIMUM RATINGS (Ta = 25°C)

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

RATING	VALUE	UNITS
Peak Power Dissipation at $T_A=25^\circ\text{C}$, $T_P=1\text{ms}$ (Note 1)	Minimum 600	Watts
Steady State Power Dissipation at $T_L=75^\circ\text{C}$ (Note 2)	3.0	Watts
Operating Temperature Range	-55 to +150	°C
Storage Temperature Range	-55 to +150	°C

NOTES:

1. Non-repetitive current pulse, per Fig. 3 and derated above $T_A=25^\circ\text{C}$ per Fig. 2.
2. Mounted on Copper Leaf area of 1.57in²(40mm²).
3. 8.3ms single half sine-wave, duty cycle= 4 pulses per minutes maximum.

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Bi-Directional Part Number	Device marking code	Reverse Stand-off Voltage VRWM (V)	Breakdown Voltage VBR (V) Min. @IT	Breakdown Voltage VBR (V) Max. @IT	Test Current IT (mA)	Maximum Clamping Voltage @IPP VC (V)	Peak Pulse Current Ipp (A)	Reverse Leakage @VRWM IR (uA)
S-P6SMB6.8CA	6.8CA	5.80	6.45	7.14	10.0	10.5	58.10	500
S-P6SMB7.5CA	7.5CA	6.40	7.13	7.88	10.0	11.3	54.00	500
S-P6SMB8.2CA	8.2CA	7.02	7.79	8.61	10.0	12.1	50.40	200
S-P6SMB9.1CA	9.1CA	7.78	8.65	9.55	1.0	13.4	45.50	50
S-P6SMB10CA	10CA	8.55	9.50	10.50	1.0	14.5	42.10	10
S-P6SMB11CA	11CA	9.40	10.50	11.60	1.0	15.6	39.10	5
S-P6SMB12CA	12CA	10.20	11.40	12.60	1.0	16.7	36.50	5
S-P6SMB13CA	13CA	11.10	12.40	13.70	1.0	18.2	33.50	1
S-P6SMB15CA	15CA	12.80	14.30	15.80	1.0	21.2	28.80	1
S-P6SMB16CA	16CA	13.60	15.20	16.80	1.0	22.5	27.10	1
S-P6SMB18CA	18CA	15.30	17.10	18.90	1.0	25.5	24.20	1
S-P6SMB20CA	20CA	17.10	19.00	21.00	1.0	27.7	22.00	1
S-P6SMB22CA	22CA	18.80	20.90	23.10	1.0	30.6	19.90	1
S-P6SMB24CA	24CA	20.50	22.80	25.20	1.0	33.2	18.40	1
S-P6SMB27CA	27CA	23.10	25.70	28.40	1.0	37.5	16.30	1
S-P6SMB30CA	30CA	25.60	28.50	31.50	1.0	41.4	14.70	1
S-P6SMB33CA	33CA	28.20	31.40	34.70	1.0	45.7	13.30	1
S-P6SMB36CA	36CA	30.80	34.20	37.80	1.0	49.9	12.20	1
S-P6SMB39CA	39CA	33.30	37.10	41.00	1.0	53.9	11.30	1
S-P6SMB43CA	43CA	36.80	40.90	45.20	1.0	59.3	10.30	1
S-P6SMB47CA	47CA	40.20	44.70	49.40	1.0	64.8	9.40	1
S-P6SMB51CA	51CA	43.60	48.50	53.60	1.0	70.1	8.70	1
S-P6SMB56CA	56CA	47.80	53.20	58.80	1.0	77.0	7.90	1
S-P6SMB58CA	58CA	52.78	55.10	60.90	1.0	79.8	7.70	1
S-P6SMB62CA	62CA	53.00	58.90	65.10	1.0	85.0	7.20	1
S-P6SMB68CA	68CA	58.10	64.60	71.40	1.0	92.0	6.60	1
S-P6SMB75CA	75CA	64.10	71.30	78.80	1.0	103.0	5.90	1
S-P6SMB82CA	82CA	70.10	77.90	86.10	1.0	113.0	5.40	1
S-P6SMB91CA	91CA	77.80	86.50	95.50	1.0	125.0	4.90	1
S-P6SMB100CA	100CA	85.5	95.0	105.0	1.0	137.0	4.50	1
S-P6SMB110CA	110CA	94.0	105.0	116.0	1.0	152.0	4.00	1
S-P6SMB120CA	120CA	102.0	114.0	126.0	1.0	165.0	3.70	1
S-P6SMB130CA	130CA	111.0	124.0	137.0	1.0	179.0	3.40	1
S-P6SMB150CA	150CA	128.0	143.0	158.0	1.0	207.0	2.90	1
S-P6SMB160CA	160CA	136.0	152.0	168.0	1.0	219.0	2.80	1
S-P6SMB170CA	170CA	145.0	162.0	179.0	1.0	234.0	2.60	1
S-P6SMB180CA	180CA	154.0	171.0	189.0	1.0	246.0	2.50	1
S-P6SMB200CA	200CA	171.0	190.0	210.0	1.0	274.0	2.20	1
S-P6SMB210CA	210CA	179.6	199.5	220.5	1.0	288.0	2.10	1
S-P6SMB220CA	220CA	185.0	209.0	231.0	1.0	328.0	1.90	1
S-P6SMB250CA	250CA	214.0	237.0	263.0	1.0	344.0	1.80	1
S-P6SMB300CA	300CA	256.0	285.0	315.0	1.0	414.0	1.50	1
S-P6SMB350CA	350CA	300.0	332.0	368.0	1.0	482.0	1.30	1
S-P6SMB400CA	400CA	342.0	380.0	420.0	1.0	548.0	1.10	1
S-P6SMB440CA	440CA	376.0	418.0	462.0	1.0	602.0	1.00	1
S-P6SMB480CA	480CA	408.0	456.0	504.0	1.0	658.0	0.90	1
S-P6SMB510CA	510CA	434.0	485.0	535.0	1.0	698.0	0.90	1
S-P6SMB530CA	530CA	451.0	503.5	556.5	1.0	725.0	0.80	1
S-P6SMB540CA	540CA	460.0	513.0	567.0	1.0	740.0	0.80	1
S-P6SMB550CA	550CA	468.0	522.5	577.5	1.0	760.0	0.80	1
S-P6SMB600CA	600CA	512.0	570.0	630.0	1.0	828.0	0.75	1

5. ELECTRICAL CHARACTERISTICS CURVES

Fig. 1-Peak Pulse Power Rating Curve

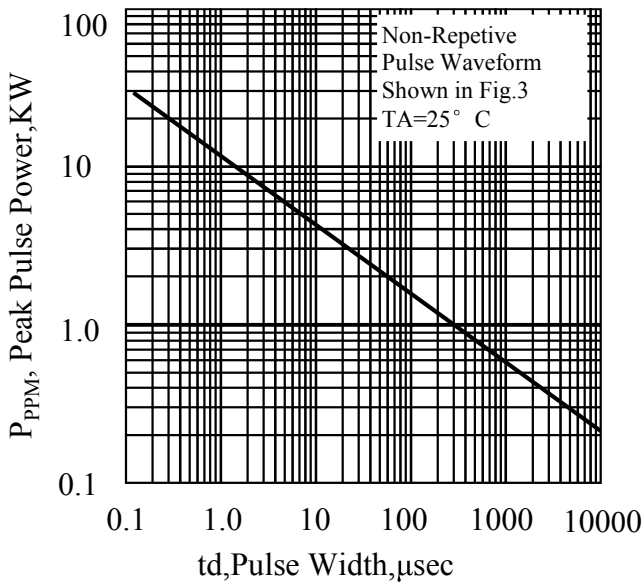


Fig. 2-Pulse Derating Curve

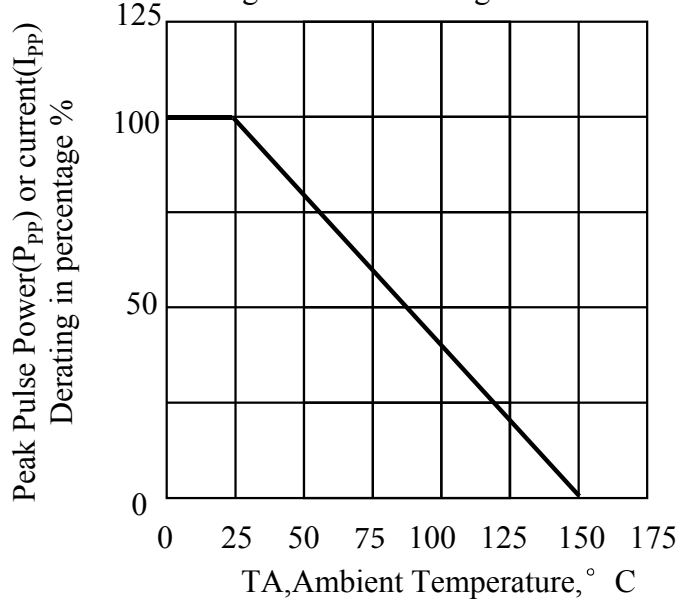


Fig. 3-Pulse Waveform

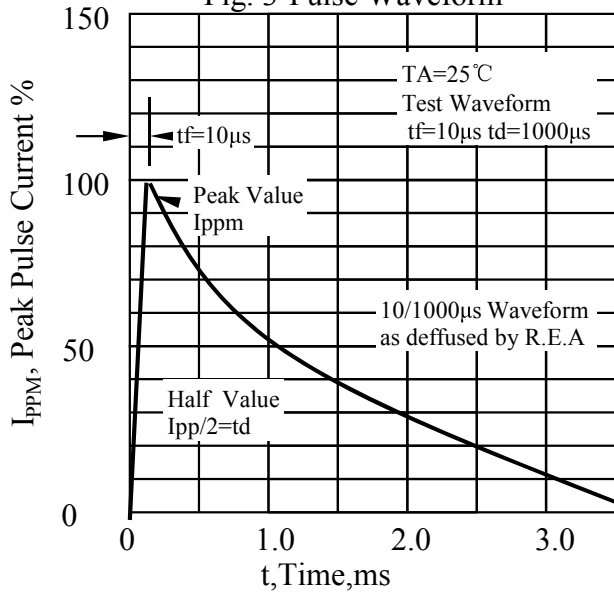
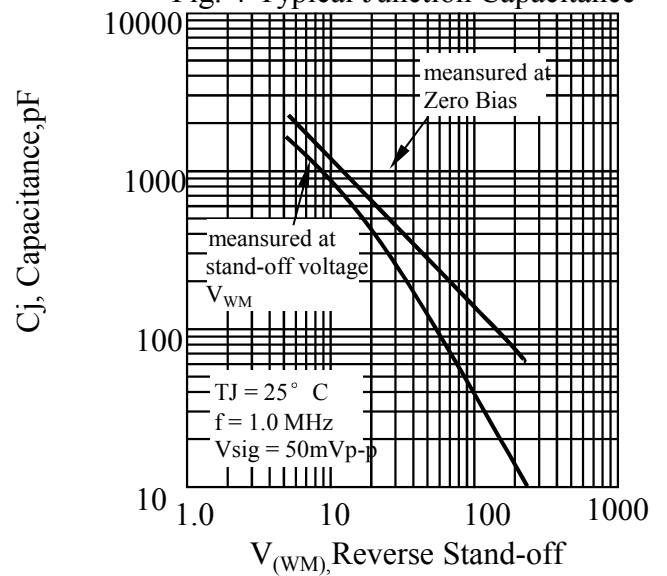
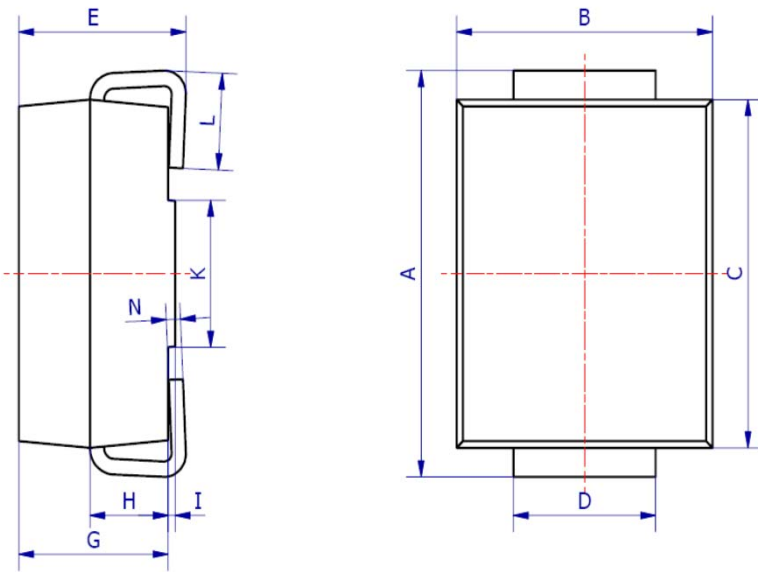


Fig. 4-Typical Junction Capacitance

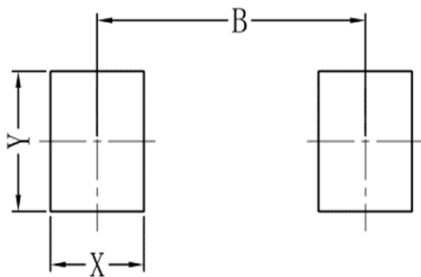


6. OUTLINE AND DIMENSIONS



SMB			
DIM	Min	Max	Typ.
A	5.20	5.45	5.25
B	3.20	4.00	3.60
C	4.30	4.60	4.50
D	1.80	2.20	2.00
E	2.20	2.50	2.35
G	1.90	2.30	2.10
H	0.95	1.25	1.10
I	0.05	0.15	0.10
K	1.70	2.10	1.90
L	0.90	1.50	1.20
N	0.10	0.30	0.20
All Dimensions in mm			

7. SOLDERING FOOTPRINT



SMB	
DIM	(mm)
X	1.60
Y	2.20
B	4.60

单击下面可查看定价，库存，交付和生命周期等信息

[>>LRC\(乐山无线电\)](#)